



STEP COMMERCIAL™

Technical Specifications

ISO 9001
REGISTERED



Description

STEP Commercial™ is designed to provide healthy and comfortable warmth in an office, warehouse, factory, etc. The system is ideal for new construction and renovation.

STEP Commercial™ can be installed in concrete or over the concrete slab and can go under almost any flooring.

STEP Commercial™ does not create drafts and blow dust around. The heat stays where you want it at the body level and not in the ceiling.

STEP Commercial™ is maintenance-free and does not require a machine room or dangerous storage of fuel or gas. The system operates on 24 volts and is normally connected to a power supply but it can also be run on solar or wind power.

STEP Commercial™ is self-regulating. As the material gets warmer, less electricity passes through the plastic – therefore it is extremely energy-efficient.

STEP Commercial™ is strong, thin and flexible, easy to install and can be cut to size on the job site.

System components:

- STEP Heating Element™
- STEP Connector Pack
- STEP Power Supply
- Stranded tinned copper wires
- STEP Crimp Tool

Optional:

- Controller
- STEP Terminal Block

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Components

Heating element type	Positive Temperature Coefficient (PTC) semi-conductive polymer EP-30-2-29W-24V	Width: 12" (305 mm)
	Length: cut to order	Maximum element length: 50 ft (15 m)
Specifics	Weight: 0.23 lb/ft (0.34 kg/m)	Thickness: 3/64" (1.2 mm)
Power Supply	Low voltage dry type isolation power supply Standard 120 Volts, other voltages available on request	
500 VA	For up to 50 ft heating element	
1000 VA	For up to 100 ft of heating element	
1500 VA	For up to 150 ft of heating element	

Electrical Power

Output wattage when powered at 24 VAC	9.0 W/ft (26 W/m) @ 68°F (20°C) 8.4 W/ft (22 W/m) @ 86°F (30°C)
Nom. resistance @ 68°F (20°C)	64 Ω/ft (20 Ω/m)
Primary draw on 120 Volts	0.075 Amps per foot (.305 mm) of heating element

Maximum wire lengths to power supply

	From Element
Wire Gauge	Max. 450 W (50 ft)
12 AWG (4 mm ²)	9 ft (2.7 m)
10 AWG (6 mm ²)	14 ft (4.3 m)
8 AWG (8 mm ²)	22 ft (6.7 m)
6 AWG (10 mm ²)	34 ft (10.4 m)
4 AWG (12 mm ²)	54 ft (16.4 m)

Ordering Information

Model No.	Element Length	Power Supply Size	Connector Kit	Lead Wire
EP-30-2-29W-24V	12" wide	24 Volts	Per strip of element	
Maximum total element length per power supply	50 ft (17.5 m)	500 VA	2 pieces connectors and tape (C&T)	Minimum 12 AWG stranded tinned copper
	100 ft (35 m)	1000 VA		
	150 ft (53 m)	1500 VA		



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